

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015196**Date Inspected:** 23-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1130**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernard Docena**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above.

This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

- 1) At weld joint E4/E5 – D1 thru D5, outside the Orthotropic Box Girder (OBG) section: ABF welding personnel Mitch Sittinger (#0315) and helper are removing the backing material / back gouging the welded joint.
- 2) At weld joint E4/E5 – C1, inside the OBG section: ABF welding personnel Songtao Huang (# 3794) and Huang Jin Quan (#9340) were performing Flux Cored Arc Welding (FCAW) with QC Inspector Bernard Docena present.
- 3) At weld joint W4/W54-A4, outside the OBG section: ABF personnel had excavated a weld repair and QC Inspector Steve McConnell had performed and accepted a Magnetic Particle Test (MT) on the excavation area.

At weld joint E4/E5 – C1, inside the OBG section this QA Inspector observed ABF welding personnel Songtao Huang (# 3794) and Huang Jin Quan (#9340) performing FCAW using the Bug-O track. This QA Inspector observed QC Inspector Bernard Docena was present. At this time welding was not being performed and QC Inspector Bernard Docena informed this QA Inspector there was a problem with the control for the travel speed on the Bug-O system and that the welding personnel were trouble shooting the system. Later this date at approximately 0900 this QA Inspector was present and observed the control had been replaced and that welding

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

was about to start. This QA Inspector randomly observed as QC Inspector Bernard Docena verified the following welding parameters: 238 amperes and 23.5 volts with a travel speed of 300 mm per minute. This QA Inspector randomly observed QC Inspector Bernard Docena verify the preheat of the base material prior to the start of production welding this date at this location. The welding observed appeared to comply with the requirements of Welding Procedure Specification (WPS) ABF-WPS-D15-3042-B-1. This QA Inspector observed welding had not been performed at weld "C2" and performed a random check of the joint fit up. The work observed appeared to comply with the contract requirements.

At weld joint E4/E5 – D1 thru D5, outside the OBG section this QA Inspector observed ABF welding personnel Mitch Sittinger (#0315) and a helper are removing the backing material / back gouging the welded joint. The work observed appeared to comply with the contract requirements.

At weld joint W4/W54-A4, outside the OBG section this QA Inspector randomly observed ABF personnel had excavated a weld repair area. This QA Inspector randomly observed QC Inspector Steve McConnell perform a visual and MT inspection of the excavation. QC Inspector Steve McConnell informed ABF personnel that several indications which appeared to be welding slag were still visible and also showed as MT indications. This QA Inspector randomly observed as grinding continued at the areas marked by QC Inspector Steve McConnell. After several minutes ABF personnel informed QC Inspector Steve McConnell the indications had been removed. This QA Inspector randomly observed as the area was re-inspected using both the visual and MT methods. QC Inspector Steve McConnell informed this QA Inspector the indications had been removed and the area was acceptable and ready for repair welding. The work observed appeared to comply with the contract requirements.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
